## CITY OF OREM SPECIAL CITY COUNCIL MEETING 56 North State Street Orem, Utah June 24, 2014

## 4:30 P.M. SPECIAL SESSION

CONDUCTING Mayor Richard F. Brunst, Jr.

ELECTED OFFICIALS Councilmembers Hans Andersen, Margaret Black, Mark E.

Seastrand, David Spencer, and Brent Sumner

EXCUSED Councilmember Tom Macdonald

APPOINTED STAFF Jamie Davidson, City Manager; Brenn Bybee, Assistant

City Manager; Bill Bell, Development Services Director; Scott Gurney, Interim Public Safety Director; Steven

Downs, Assistant to the City Manager

VIVINT STAFF Dean Lundberg

## SCHEDULED ITEMS

4:30 P.M. DISCUSSION

Fiber Network Alternatives – Vivint

Mayor Brunst called the meeting to order at 4:36 p.m. and allowed time for introductions.

The purpose of the meeting was to discuss a fiber network alternative. Mayor Brunst asked the Mr. Lundberg to introduce who owned Vivint and explain why it was doing communications as well as security. Mr. Lundberg said Vivint was best known as a security company that had about 900,000 customers nationwide. He said that in the past year Vivint had started providing wireless services. Vivint was in the early stages of deploying network services in several states and around Utah. Vivint was working with a team in California in developing a new technology as well.

Mayor Brunst asked who manufactured the technology that they were using now, what Vivint owned, what Vivint purchased, and what Vivint planned. Mr. Lundberg said Vivint had purchased a company in California called "Smart Road," which was a company that used 4X4 MIMO, a multi-antenna technology. Vivint used it for short-range delivery of internet.

Mayor Brunst asked for more information about Vivint. Mr. Lundberg said that Vivint was started by people in the local area. It was recently bought by Blackstone, which would infuse funds to grow the business. Blackstone and Vivint had a vision to build broadband.

Mayor Brunst and Mr. Lundberg discussed where Vivint's offices were located and more about Vivint's presence in the community. In response to a question, Mr. Lundberg defined "POP" as

Point of Presence and said it might be a tower or the top of a building. He said they were connected to fiber and they broadcast out wireless signals to a micro-hub. He said they used a licensed spectrum between the POP and the micro-hub.

Mr. Lundberg explained that a "spectrum" was radio frequencies. He said each wireless provider owned a spectrum. Mr. Lundberg and Mayor Brunst discussed spectrums and how they were purchased and used.

Mr. Lundberg said they used an unlicensed band to go from the micro-hubs to the homes. Delivery differed based on distance and obstacles, but the company was consistent in delivering 50Mbps up and down to the homes. Vivint was making investments that it hoped would allow Vivint to have higher speeds.

Mr. Lundberg said Vivint had interest in UTOPIA's fiber platform to skip the tower. Vivint hoped thereby to reach places that were not connected to fiber, with a low-cost install. Vivint could not yet meet the needs of those who wanted 1 GB of service but that not many customers wanted that much.

Mr. Lundberg indicated Vivint charged \$55 for 50 Mbps and \$45 for 25 Mbps.

Mr. Lundberg said Vivint would be interested in using the UTOPIA fiber right to Vivint's microhubs.

Mayor Brunst asked about distances and number of homes. Mr. Lundberg said that there were typically about forty to sixty homes per micro-hub grid. Vivint would plan to actually service about twelve homes per grid. Vivint could potentially service all sixty-five homes, but there could be problems with congestion and services would depend on the environment. Vivint did not plan to service every home, but additional capacity could be added as time went on.

Mayor Brunst said that some neighborhoods had greater concentrations of homes that wanted different service than others. Mr. Lundberg said he thought Vivint could service most people who wanted wireless, but he could not say all. Vivint did not plan to take all the market shares; most of Vivint's planned grids were in residential areas. Mr. Lundberg said that the commercial market was not Vivint's focus right now.

In response to a question Mr. Lundberg said that, should Orem have ubiquitous fiber from UTOPIA, it would be more of a risk for Vivint to build its network. He was not sure if Vivint would prioritize a way to do that.

Mayor Brunst asked about Vivint using UTOPIA and the rates involved. Mr. Lundberg said Vivint would pay UTOPIA for services.

Mayor Brunst worked on some mathematical figures of how much would be paid per hub, per month, per year. Mr. Lundberg said the \$20 per household fee would be quite expensive. UTOPIA rates would have to be compared to rates from other fiber providers.

An unidentified Councilmember said that he understood Vivint would be a service provider instead of a system operator, and that Vivint would pay UTOPIA for access to the network.

Mr. Lundberg said that the decision before the Council regarding UTOPIA was very difficult. As things developed and situations changed Vivint might have other plans. He said he did not have a solution for the current problem. Mr. Lundberg compared the Digis package to the Vivint package in terms of price value. Vivint was providing much faster speeds for the money. Mr. Lundberg voiced it was difficult for the average person to consistently use more than 10–15 Mbps of service. Vivint felt that the 50 Mbps was a great future and that a lot of things would have to change to make 50 Mbps unsatisfactory to the vast majority of users.

Mr. Lundberg said a lot of things were changing regarding television. Vivint was interested in providing TV over the network, but currently TV services were not its current business.

Mayor Brunst mentioned TV streaming over the internet. Mr. Lundberg said a lot more people were cutting off the cable and streaming over the network. VOIP was not a high demand product as there were problems to solve with it regarding maintaining quality.

Mr. Davidson mentioned wind bursts and snow storms that would limit the ability to service a site and asked if that was a concern. Mr. Lundberg replied it was not. There were different properties to spectrum and if the distance was kept short Vivint could get through certain obstructions without losing the signal.

Mayor Brunst asked for clarification that, if they were only going from the POP to about 12 homes, they would be able to get through some trees. Mr. Lundberg said that was the case and noted that Vivint was not proposing a replacement for a ubiquitous UTOPIA.

Mayor Brunst said that some parts of the city were a rough environment for building.

Mr. Andersen asked about overlapping of the signals between the grids. Mr. Lundberg said there would be overlapping.

Mayor Brunst asked Mr. Lundberg to explain about what Vivint's product would look like. Mr. Lundberg said that the end user module would be about nine inches wide, 12 inches tall, and about an inch-and-a-half thick. He said it would be mounted on the roof. There would also be equipment at an access point which would be similar.

Mayor Brunst asked about where Vivint purchased the equipment it used. Mr. Lundberg said some parts were made in China. There were several steps to the manufacturing process and some parts were made in the U.S.

In answer to a question about install charges to customers, Mr. Lundberg said they would not be trying to recover their costs for the devices. The basic install price was \$40and typical agreements would be for two years, however customers could pay more per month for not having an agreement.

Mr. Lundberg said that swap outs would be driven by advances in technology.

Mayor Brunst asked where Vivint saw itself two or five years from now, technology-wise.

Mr. Lundberg said that Vivint was close to the 100 Mbps range and could be there within 2 to 3 years. He said he anticipated the price for 100 Mbps would be market driven.

Mr. Andersen asked what percent of Lindon was wired for UTOPIA. The representative from UTOPIA said that about 90% of Lindon was wired. Mr. Lundberg added that he thought Vivint could go into Lindon today and get some market share.

Mr. Davidson asked about problems with too many users on the network. Mr. Lundberg said Vivint had tried to minimize those problems.

There was discussion about Vivint being owned by Blackstone, the future of security systems and utilities, and Vivint's desire to expand its horizons. Mr. Lundberg said security would remain a significant piece of the business.

There was discussion about the connection between fiber and wireless; about speed, service, and price; and about reliability of internet service.

Mr. Lundberg said Vivint had experience in the field and that they had a Google guy on their staff and a former UTOPIA guy on their staff.

A citizen asked if Vivint's fee would be mandatory. Mr. Lundberg said it would not be mandatory. Mayor Brunst added that it would be a part of Vivint's costs because Vivint would be leasing fiber from UTOPIA. Mr. Lundberg said that if the Macquarie deal went through, it would be difficult for Vivint to compete because it would have to charge its prices on top of the \$20 utility fee. He said that if the Macquarie deal did pass, Vivint would probably not deploy in Orem.

There was discussion about the locations of Vivint's towers. Mr. Lundberg said that if Vivint did not have fiber connected into each square they would use towers to transmit to the squares. The homes that were used as access points in the squares would receive free service in swap for the electricity that would be needed.

Mayor Brunst mentioned that there was an individual in Lindon who was taking the signal illegally from UTOPIA and using it to broadcast wireless.

There was discussion about the quality of wireless around obstacles, such as mature trees existing structures. Mayor Brunst said that Vivint wanted to use fiber to the homes that were access points, rather than use towers.

Mr. Lundberg said Vivint wanted to find a way to utilize the fiber network to improve Vivint's quality of service and to improve their ability to deliver faster speeds. He said there was an advantage to tapping into the fiber.

Mrs. Black said she understood Vivint would do its process as a client after the build out of fiber took place. Mr. Lundberg acknowledged Mrs. Black and said his point was to share a perspective of what Vivint would like to do some day in the near future. He said Vivint was waiting to see what happened with the City before it decided.

Mrs. Black asked if Vivint's plans were real intentions or possibilities.

Mr. Lundberg said that it was a discussion because there was still so much that could happen before anything definite could occur.

Mayor Brunst thanked Mr. Lundberg for his attendance and called for a motion to adjourn.

Mrs. Black moved to adjourn the meeting. Mr. Andersen seconded the motion. The vote to adjourn was unanimous.

## **ADJOURNMENT**

The meeting adjourned at 5:41 p.m.

Donna R. Weaver, City Recorder

Approved: August 26, 2014